February 2012

INTERNATIONAL CYANIDE MANAGEMENT CODE CERTIFICATION AUDIT

Newmont Asia Pacific Boddington Gold Mine Certification Audit Summary Audit Report

Submitted to:

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REPORT

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Report Number. 117643002-005-R-Rev1

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Golder Associates

SUMMARY AUDIT REPORT
FOR OPERATIONAL GOLD MINES

Name of Mine:	Newmont Boddington Gold Mine
Name of Mine Owner:	Newmont Asia Pacific
Name of Mine Operator:	Newmont Boddington Gold
Name of Responsible Manager:	Steve Hart, Operations Manager
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LOCATION DETAIL AND DESCRIPTION OF OPERATION:

Newmont Mining Corporation is primarily a gold producer, with significant assets or operations in the United States, Australia, Peru, Indonesia, Ghana, Canada, New Zealand and Mexico. Founded in 1921 and publicly traded since 1925, Newmont is one of the world's largest gold producers and is the only gold company included in the S&P 500 Index and Fortune 500. Headquartered near Denver, Colorado, the company has over 34 000 employees and contractors worldwide.

In 2007, Newmont became the first gold company selected to be part of the Dow Jones Sustainability World Index. Newmont's industry leading performance is reflected through high standards in environmental management, health and safety for its employees and by creating value and opportunity for host communities and shareholders.

The Newmont Boddington Gold Mine (NBG) is a gold and copper mine with a hard rock mining and processing facility located 16 km north-west of Boddington town centre, Western Australia and 130 km south-east of Perth. The operation was initially constructed in the 1980's with the first production in 1987. The current expanded operation commenced construction in 2006 with commercial production achieved in November 2009. The mine is expected to become Australia's largest gold mine once it reaches full production, with 35 million tonnes of ore extracted per annum for processing.

The expansion in 2006 consisted of installation of a new plant, refurbishment of some existing infrastructure and construction of a new facility for disposal of residue (tailings). The NBG operation consists of an open pit and underground operations, processing circuit, Residue Disposal Areas (RDA) and water storage facilities.

The processing circuit includes flotation cells, where copper concentrate is produced and trucked to the Bunbury Port facility for shipment. Tailings from the flotation circuit enter the two carbon-in-leach (CIL) trains, consisting of 12 tanks each, and sodium cyanide is added to extract gold from the slurry mix. Each CIL train has a Residue Surge Tank that pumps four kilometres to the Booster Station at the RDA, where it is distributed for disposal to the RDA. At the Booster Station, Caro's acid is added to the residue to reduce

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Weak Acid Dissociable cyanide (WAD CN) levels. The supernatant pond on the RDA is maintained <30 ppm WAD CN. Return water from the RDA is treated with Caro's acid to reduce WAD CN levels to <0.5 ppm in the process water distribution. This water is gravity fed to the process water pond at the plant via a high-density polyethylene pipeline. The first use of process water in the circuit is at the fine screens prior to material entry into the four ball mills.

NBG's cyanide is sourced from Australian Gold Reagents (AGR), a joint venture between CSBP Ltd. (75%) and Coogee Chemicals (25%), under a Sodium Cyanide Solution Supply Agreement (Supply Agreement). AGR, the cyanide producer, was certified as compliant under the Code on 24 November 2010.

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AUDITORS FINDINGS

The Newmont Boddington Gold Mine is:

☒ **in full compliance with**

☐ in substantial compliance with **The International Cyanide Management Code**

☐ not in compliance with

No significant cyanide incidents or cyanide exposures and releases were noted as occurring during the audit period.

Audit Company: Golder Associates

Audit Team Leader: Tom Carmichael, RABQSA International (14544)

Email: tcarmichael@golder.com.au

Name and Signatures of Other Auditors:

Name	Position	Signature	Date
Tom Carmichael	Lead Auditor and Technical Specialist		7 February 2012
Russell Beazley	Auditor		7 February 2012
Jaclyn Ennis-John	Auditor		7 February 2012

Dates of Audit:

The Certification Audit was undertaken over three days (nine person-days) between 30 August 2011 and 1 September 2011.

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code's *Gold Mining Operations Verification Protocol* and using standard and accepted practices for health, safety and environmental audits.

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PRINCIPLE 1 – PRODUCTION

Encourage Responsible Cyanide Manufacturing by Purchasing from Manufacturers that Operate in a Safe and Environmentally Protective Manner

Standard of Practice 1.1: **Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 1.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 1.1, requiring the operation purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide and to prevent releases of cyanide to the environment.

NBG operations purchase all their cyanide requirements from AGR (Australian Gold Reagents Pty Ltd) under a Sodium Cyanide Supply Agreement (Supply Agreement). The Supply Agreement requires cyanide to be produced at a facility that has been certified as complying with the Code. AGR, the cyanide producer, was recertified as being compliant with the Code on 24 November 2010.

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PRINCIPLE 2 – TRANSPORTATION

Protect Communities and the Environment During Cyanide Transport

Standard of Practice 2.1: **Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 2.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 2.1, requiring that the operation establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

NBG purchases its cyanide reagent from AGR under a Supply Agreement. The Supply Agreement establishes clear lines of responsibility for safety, security, release prevention, training and emergency response.

The Supply Agreement extends to any subcontractors used by AGR, the cyanide transporter.

The West Australian Supply Chain of AGR, the cyanide transporter, was re-certified under the Code on 10 April 2010. The parties involved in the operation of the AGR West Australian Supply Chain and their operational roles are identified in a *Summary Audit Report* dated April 2010 that has been published on the ICMI website.

The CSBP Shipping Documents provide no evidence to suggest that NBG receives bulk delivery of cyanide under any other written agreement.

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Standard of Practice 2.2: **Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 2.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 2.2, requiring that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

NBG sources all its cyanide requirements from AGR and has done so for some time.

The text of the Supply Agreement requires the transporter to comply with the requirements of the Code

The West Australian Supply Chain of AGR, the cyanide transporter, was re-certified under the Code on 10 April 2010. The parties involved in the operation of the AGR West Australian Supply Chain and their operational roles are identified in a *Summary Audit Report* dated April 2010 that has been published on the ICMI website.

Under AGR's transport certification, Coogee Transport delivers cyanide to NBG. Shipping documents confirm the transport of cyanide from Kwinana to NBG by Coogee Transport - Chemical.

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PRINCIPLE 3 – HANDLING AND STORAGE

Design and Construct Unloading, Storage and Mixing Facilities Consistent with Sound, Accepted Engineering Practices, Quality Control/Quality Assurance Procedures, Spill Prevention and Spill Containment Measures

Standard of Practice 3.1: **Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 3.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Handling and Storage Practice 3.1, requiring that cyanide handling and storage facilities are designed and constructed consistent with sound, accepted engineering practices, quality assurance/quality control (QA/QC) procedures, spill prevention and spill containment measures.

Facilities for unloading and storing cyanide have been designed and constructed in accordance with cyanide producers' guidelines, applicable jurisdictional rules and/or other sound and accepted engineering practices for these facilities.

Unloading and storage areas for liquid cyanide are located away from people and surface waters.

The cyanide unloading area consists of a concreted pad graded toward the HDPE lined concrete secondary containment area for the 17 000 kL cyanide storage tank. Dividing speed hump style bunds separate the cyanide unloading area from the lime and caustic unloading pads.

The unloading facility consists of an isotainer unloading bay located on a graded slab of concrete that will catch any drips of reagent cyanide that may be released during the operation and prevent minor drips and spills from reaching the ground.

The operation employs four methods to prevent the overfilling of cyanide storage tanks, namely level indicators, unloading permissive interlock, high Level alarm and the tank is maintained at or below the 70% level.

The cyanide storage tank is located on a ring beam with a HDPE surface that can prevent seepage to the subsurface. The site does not have a mixing tank.

The cyanide storage tank secondary containment consists of HDPE lined concrete.

Cyanide is stored in a well ventilated area, only as a liquid within tanks minimising the potential for contact with water, in a secure area where public access is prohibited via a gated fence around the cyanide storage area and separately from incompatible materials such as acids, strong oxidisers and explosives and apart from foods, animal feeds, and tobacco products.

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Standard of Practice 3.2: **Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 3.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 3.2 requiring that cyanide handling and storage facilities are operated using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

Liquid cyanide is delivered to the site in isotainers and transferred to a bulk storage tank within a bunded storage area. After the cyanide has been transferred, the isotainers are returned to AGR for reuse.

The unloading is carried out through cooperation between NBG and AGR and the unloading is actually one procedure with complementary roles. The *Transferring Cyanide From Isotainer to Site Storage Tank* procedure details valve sequences which are the responsibility of the CSBP Driver. The NBG representative is not required to operate any valves apart from the shutoff valve which may be required to be operated in an emergency. The *Observing Cyanide Unloading* procedure details the role of the observer.

Solid cyanide is not used on site.

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PRINCIPLE 4 – OPERATIONS

Manage Cyanide Process Solutions and Waste Streams to Protect Human Health and the Environment

Standard of Practice 4.1: **Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.1, requiring that the operation implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

Written management and operating plans or procedures have been developed for cyanide facilities including unloading and storage facilities, leach plants, tailings impoundments and cyanide treatment systems. The procedures require sign-off by the employee and supervisor confirming that they have read the procedure and will comply with the procedure. The site does not have any cyanide mixing facilities, regeneration systems, disposal systems or heap leach operations.

The operation has plans and procedures that identify the assumptions and parameters on which the facility design was based and applicable regulatory requirements as necessary to prevent or control cyanide releases and exposures consistent with applicable requirements. The *Consolidated Environmental Design Criteria* document was developed to specify environmental design criteria to be adopted for engineering design, feasibility costing, all Project related construction, operational modifications and closure and reclamation of the NBG Expansion Project. The design basis, assumptions, and commitments noted in this document have been included within operational procedures and plans, including the *RDA Operating Manual* and *Process Water Operating Plan*. The *RDA Operating Manual* references the *RDA Wall Failure SOP*.

The operation has plans or procedures that describe the standard practices necessary for the safe and environmentally sound operation of the facility including the specific measures needed for compliance with the Code, such as inspections and preventative maintenance activities. The manuals used for training include directions on specific requirements for implementing practices required including operational inspections in the reagent storage, leaching and tailings areas with focus on leaks from pumps and piping and readiness of secondary containments to handle such leaks. There are also specific standard operating procedures that support the safe and environmentally sound operation of the facility

The operation has two main procedures to identify when changes in a site's processes or operating practices may increase the potential for the release of cyanide and to incorporate the necessary release prevention measures. The Process Plant utilises a software package (Babel Fish) for software and instrumentation changes within the Process Plant. The site has also developed a formal *Management of Change* procedure to identify and control hazards and risks associated with changes to facilities, equipment, materials, mining, milling or operating processes prior to any change being implemented. The scope does not apply to changes covered by an existing defined risk management or controlled process such as the instrumentation and software changes through Babel Fish. The procedure requires all changes to be risk assessed to determine the initial change risk or opportunity. Depending on the result, a Minor or Major Change Management Form is completed. The Change Initiator must obtain his/her Supervisor's sign-off prior to the

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change management process going any further. If the Supervisor agrees with the change, then a list of stakeholders is developed, who will participate in a formal risk assessment process. It is up to the Change Initiator and their Supervisor to determine whether environmental and safety personnel are stakeholders. The initial risk assessment process guides the selection of appropriate stakeholders and the Supervisor is ultimately responsible for ensuring that the appropriate stakeholders are engaged. Following the formal risk assessment process, all low/medium risk changes must be approved by the Technical Specialist, Department Superintendent or Department Manager. All high/extreme risk changes must be approved by the Department Manager and engineering, production, maintenance, environmental, community and HSLP department representatives. Evidence for changes involving cyanide was provided to the auditor that demonstrated that environmental and health and safety personnel were consulted.

The operation has developed formal cyanide management documents that address contingency procedures for situations when inspections and monitoring identify a deviation from design or standard operating procedures.

The *Process Water Operating Plan* identifies contingencies for a range of trigger events.

Section 13 (Emergency Action Plan) of the *RDA Operating Manual* includes guidance on responding to emergency scenarios.

At a corporate level Newmont has developed a *Rapid Response System* (RRS) on EMQnet for high level communication for all Newmont operations. The RRS aims to mitigate and prevent the escalation of adverse consequences in the event that existing risk management controls fail. The RRS details the required actions by nominated RRS Team Members for various scenarios.

To complement the RRS, NBG has developed and implemented an integrated and tiered emergency management system specific to its operations.

The operation inspects cyanide facilities on an established frequency sufficient to assure and document that they are functioning within design parameters.

Tanks and pipelines are formally inspected by ALS Industrial Pty Ltd on a scheduled basis.

Pumps are inspected by process maintenance technicians on a scheduled basis.

Stormwater ponds are checked on a daily basis as part of the pre-start checks.

Daily checks are undertaken by Process Technicians, Maintenance Technicians and Engineering Services Reliability Technicians.

Monthly environmental inspections are undertaken of the plant.

Monthly safety inspections are undertaken of the plant.

Such inspections are undertaken daily in the normal course of process operations and are an adjunct to operational activities. Identified issues are recorded for corrective action by reporting to the mill foreman who raises a maintenance work order. Process Technicians are trained in conditions to look for as part of their inspections.

Inspections conducted by maintenance personnel provide emphasis on the physical integrity of equipment more than leaks.

Preventative maintenance inspections are conducted every four weeks on tanks and containments including foundations and sumps. A procedure has been developed describing the Maintenance Management System for Storage and Process Tanks with Cyanide Solution.

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At the start of each shift, the pre-start checklist is undertaken by area technicians, which includes secondary containment. For example the level in the RDA pipeline catchpits are checked.

Preventative maintenance inspections are conducted every four weeks on tanks and containments including foundations and sumps. Secondary containments observed did not appear to contain external drain valves.

The four weekly preventative maintenance inspections conducted on tanks and containments include an inspection of the tank leak detection telltales. The site does not have any leach pads.

The Process Department Engineer advised that preventative maintenance inspections are conducted on all cyanide pumps and valves every six weeks.

A procedure (*Pipeline Management System for Pipelines Carrying Cyanide Solution*) has been developed to establish a Pipeline Management System for NBG.

NBG undertake inspections of the RDA's. F1 RDA is inspected 6 hourly. There are also monthly routine inspections and periodic operational audits, R4 RDA is inspected daily.

The *RDA Operating Manual* states that the frequencies and checks comply with the requirements of the DMP for a Category 1 facility.

Stormwater Pond 2 is monitored visually for subsidence or wall shifting during shift pre-start check activities. Any observed change is reported to management. The freeboard of the pond is observed as part of the pre-start check activities and is also monitored continually via field instruments feeding back to the alarmed DCS. If the pond level reaches the set freeboard the plant will not operate until the level in the pond is reduced to a predetermined level.

Inspections are documented, including the date of the inspection, the name of the inspector and observed deficiencies. The nature and date of corrective actions are documented. Records are maintained. Preventative Maintenance records also note date of the inspection, the name of the inspector, and any observed deficiencies. Records are kept of the third party tank integrity inspections and associated corrective actions.

Preventive maintenance programs have been implemented and activities documented to ensure that equipment and devices function as necessary for safe cyanide management. Ellipse software is used to administer schedules, requirements and records of routine preventive maintenance activities.

The operation has compiled a list of cyanide critical equipment and has developed a pipeline inspection program outside of the tailings and return water lines. A search of the Ellipse list of cyanide equipment indicates that all planned maintenance for tanks are up to date.

The pipelines to the tailings storage facilities are inspected (including thickness testing) progressively during shutdowns approximately three times per year. Pumps are inspected under planned maintenance tasks by site personnel.

The operation does not require emergency power resources to operate pumps and other equipment to prevent unintentional releases and exposures in the event its primary source of power is interrupted.

The design of the plant in relation to the cyanide code incorporates full secondary containment of all potential releases from processes or pipelines containing cyanide.

The residue delivery and decant pumps are connected to the process plant power distribution system. In the event of a total loss of power all pump systems and automatic valves not connected to standby generators will cease operations.

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Standard of Practice 4.2: **Introduce management and operating systems to minimise cyanide use, thereby limiting concentrations of cyanide in mill tailings.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 4.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.2, requiring that the operation limit the use of cyanide to that optimal for economic recovery of gold so that the waste tailings material has as low a cyanide concentration as practical.

The operation conducts a programme to determine appropriate cyanide addition rates in the mill and evaluate and adjust addition rates as necessary when ore types or processing practices change cyanide requirements.

This initial program was developed and outlined as part of the Mine Expansion Project Prefeasibility Study.

Initial cyanide rates were based on metallurgical test work. A diagnostic gold analysis (speciation) is undertaken monthly to assess benefits of increasing the cyanide dosing rate to increase recover rate and thereby optimise cyanide addition rates. Twice-weekly bottle roll tests are used to change the dosing rates (set points) via computerised set-points.

WAD cyanide is monitored continuously at the entry and exit points of the CIL, the entry and exit points of the booster station and the entry and exit points of the cyanide destruct tank.

The operation evaluated various control strategies for cyanide additions during 2010, as detailed below. The operation is in a steady state process with monitoring via the twice weekly bottle roll tests and the monthly composite leach tests.

The operation conducted a series of metallurgical trials to investigate the processing impacts associated with changing the cyanide addition points and reducing the free cyanide concentration target the CIL performance trials commenced on the 31 March 2010.

The operation has implemented a strategy to control its cyanide addition.

Cyanide addition is monitored through a series of on-line Mintek cyanide analysers which feed free cyanide and WAD cyanide results to the DCS which in turn adjusts cyanide addition rates to maintain the established cyanide set points.

The Mintek cyanide analysers at the front end of the CIL train monitor free cyanide while the analysers at the end of the circuit and at the booster station monitor WAD and free cyanide in residue being pumped to the RDA after cyanide destruct and decant return water being pumped to the process water pond after cyanide destruct.

Cyanide addition set points and the CIL performance are validated through weekly (grab sample) and monthly (composite sample) standard bottle roll tests.

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Standard of Practice 4.3: **Implement a comprehensive water management program to protect against unintentional releases.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 4.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.3, requiring the operation to implement a comprehensive water management programme to protect against unintentional releases.

The operation uses a comprehensive and probabilistic water balance, the GoldSim probabilistic water balance model (PWBM), to assist in the management of their water resources. The PWBM is updated weekly and run at the end of each month, taking into account the following information, which is stored on an input spreadsheet:

- Daily Data (including rainfall, evaporation and Hotham River Flow)
- Weekly Data (surveyed surface levels of site water storage bodies)
- Monthly Data (including flows between site water storage bodies and tailings deposition)
- Constants (including characteristics of tailings; planned water use data associated with throughputs; and runoff parameters (this is a constant) based on the larger catchment (34 Mile Brook) and for each operational area).

The PWBM also considers the following:

- Account extreme weather events and storm intervals through the use of freeboard requirements set by regulators.
- Weather conditions, including precipitation and evaporation represents actual site conditions. Weather data is recorded automatically (daily) by the sites weather monitoring station. Rainfall and evaporation based parameters were obtained from the BGM site records and historical rainfall records from BOM.
- Runoff from the upgradient watershed, including adjustments as necessary to account for differences in elevation and for infiltration of the runoff into the ground. Runoff is calculated for the different water areas of the site using runoff factors; and rainfall runoff from unaffected catchments is simulated using the Australian Water Balance Model (AWBM).
- Solution losses in addition to evaporation, such as the capacity of decant, drainage and recycling systems, allowable seepage to the subsurface are included as applicable. Minor seepage loss has been included, except for facilities that have an under drainage system and a LCRS installed. Allowable surface water discharges are not included as there is no discharge to the surface water.
- The effects of potential power outages or pump and other equipment failures on the drain down from a leach pad or the emergency removal of water from a facility are not considered in the model. NBG has appropriate back-up power or sufficient drain down storage.

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The following is not considered by the PWBM:

- Freezing and thawing conditions on the accumulation of precipitation within the facility and the upgradient watershed, as these have not been experienced at the site since records have been kept.
- Discharges to surface water, as none occur at NBG.

NBG's operating procedures incorporate inspection and monitoring activities to implement the water balance and prevent overtopping of ponds and impoundments and unplanned discharge of cyanide solutions to the environment.

The Water Management Plan states the Operating Rules for Facilities and details trigger levels and contingencies based on the planning and assumptions made as part of the development of the PWBM.

NBG undertake inspections of the RDAs every six hours; and the pump stations, water ponds and pipeline checks are completed once per shift. Inspections are undertaken by Processing Technicians. Ponds and impoundments are designed and operated with adequate freeboard above the maximum design storage capacity determined to be necessary from water balance calculations. Audits, as required by the regulatory authorities, are conducted on the RDA facilities by a qualified engineer on an annual basis.

A visual inspection of the facilities confirms that the freeboard of both the RDA and Process Water Pond were in excess of 1 m.

The operation does measure onsite precipitation and evaporation on a daily basis from the sites weather station. Rainfall, temperature and pan evaporation measurements are recorded and input into the PWBM weekly, any revisions are made monthly as required.

Standard of Practice 4.4: **Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.4**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.4, requiring the operation implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

The operation does not need to restrict access to open waters as there are no open water facilities where WAD cyanide exceeds 50 mg/L. This can be demonstrated by the operation through its monitoring data.

The auditor was advised by the Environmental Superintendent – Monitoring that the following facilities have the potential to contain cyanide greater than 50 mg/L WAD cyanide:

- F1/F3 RDA Decant
- Process Water Pond
- CIL Containment Pond
- Stormwater Pond 2

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All of the facilities, except of Stormwater Pond 2, are included in the monthly environmental monitoring suite as well as daily monitoring conducted by the Processing Department. All results observed recorded WAD cyanide levels below 50 mg/L. Stormwater Pond 2 is not monitored, as it cannot be accessed. However the water inputs (Process Water Tank, the Process Water Pond and raw water) all have WAD cyanide levels below 50 mg/L.

The Environmental Superintendent – Monitoring advised the reasoning behind the rest of the open bodies not having the potential to contain cyanide, which the auditor accepts. However, as a result of regulatory requirements, some of these facilities are also included in the monthly environmental monitoring suite. These results were reviewed and cyanide was not recorded at any of these facilities.

Water samples are analysed at the NATA accredited MPL Laboratories and all water bodies are sampled monthly. In addition to the monthly monitoring by the Environmental Department, F1/F3 decant (prior to disposal), the Process Water Pond and Tank; and the CIL Containment is monitored daily by the Processing Department.

Maintaining a WAD cyanide concentration of 50 mg/L or less in open water appears effective in preventing significant wildlife mortality.

As no open water bodies exceed 50 mg/L WAD cyanide, the operation has not implemented measures (such as fencing or netting) to restrict access by wildlife and livestock. However, even though WAD cyanide is less than 50 mg/L, additional wildlife deterrent measures are used. Wildlife is deterred from using F1 as a drinking source through a series of 26 artificial drinking points, which have been installed around the perimeter. In addition, R4 RDA is used as a decoy habitat for wildlife.

The Environmental Superintendent – Monitoring did advise that five fauna mortalities have been recorded in 2011. However, the incident investigations, including post-mortems when able to be conducted, have determined that they were not cyanide related.

Wildlife scaring (hazing) devices, such as gas canons and a sound system, are also used. Hazing techniques are employed if it is predicted that the WAD cyanide concentration will rise above 50 mg/L in a spike event (unlikely) or prior to a change in the operation (e.g. the cannons were used prior to the discharge of residue at F3). During a spike event, the Wildlife Observer will conduct more frequent monitoring of the RDAs and the high-risk areas. The intensity and duration of the wildlife hazing and increased monitoring will be determined by the Environmental Officer – Processing and the RDA Production Coordinator.

The facility does not have heap leach facilities.

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Standard of Practice 4.5: **Implement measures to protect fish and wildlife from direct or indirect discharges of cyanide process solutions to surface water.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.5**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

Standard of Practice 4.5 is NOT APPLICABLE to NBG.

The operation does not have direct or indirect discharges to surface water.

The majority of the operation is located in the catchment of 34 Mile Brook. The closest natural surface water body is 34 Mile Brook, which is a tributary of the Hotham River. There is no direct discharge to these systems. However, the site does monitor surface water around and off the site. It was identified that NBG monitor 34BK9 and D4WRD both which are downstream of the operation and within 34 Mile Brook Catchment. 34BK9 is a compliance point on the DEC Operating Licence L8306/2008/1. Surface water monitoring results were reviewed for these two bores and total and WAD cyanide levels were below the detectable limit of <0.01 mg/L.

In the event that seepage form F1/3 RDA occurs, seepage is captured via the Underdrainage Collection System and the LCRS. Any seepage collected is pumped back into the F1/3 RDA decant. A similar system is in place under the Process Water Pond.

In addition to the seepage collection/protection measures, surface water monitoring for cyanide is conducted at D1 WSR, as any other seepage would be expected to report to D1 WSR. D1 WSR seepage reports to 34MBDP, where monitoring for cyanide is also undertaken. The monitoring results for WAD and total cyanide are all less than 0.01 mg/L in both D1WSR and 34 MBDP.

Standard of Practice 4.6: **Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.6**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.6, requiring the operation implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater

The operation does implement specific management measures to protect the beneficial use beneath or immediately downgradient of the operation.

The Water Management Plan details the seepage protection structures in use at NBG:

- Underdrainage Collection System. This is installed at F1/3 RDA Decant and the Process Water Pond.
- Leak Collection and Recovery System. This is installed at F1 RDA and the Process Water Pond.
- R4 Seepage Ponds

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- F1, F3 and R4 Toe Drains

The deposition plan (in the RDA Operating Manual) states that the decant pond shall be over the underdrainage systems and the LCRS.

WAD cyanide concentrations in groundwater are below levels that are protective of identified beneficial uses of groundwater. The DEC has set monitoring limits on a number of bores on NBG's Licence L8306/2008/1. The licence stipulates that WAD cyanide levels in groundwater must be under 0.5 mg/L. The 18 groundwater monitoring bores listed in the 2010 AER, four of which are compliance sites, all detect less than 0.01 mg/L of total and WAD cyanide.

The operation does not use mill tailings as underground backfill.

Standard of Practice 4.7: **Provide spill prevention or containment measures for process tanks and pipelines.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.7**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.7 requiring that the operation Provide spill prevention or containment measures for process tanks and pipelines.

Spill prevention or containment measures have been provided for all cyanide unloading, storage, mixing and process solution tanks.

Each of the 13 tanks in CIL Train 1 and 13 tanks in CIL Train 2 are located on ring beams.

The cyanide storage tank is located on a ring beam. The apron slab and top of overflow bund wall has a trowelled finish. The tank bund is concrete paved and fitted with a sump.

The 9 Cleaner Scavenger Tail Leach Tanks are located on ring beams.

The booster station tank and cyanide destruction tank are both constructed on ring beams.

Each of the ring beams are equipped with leak detection systems. The leak detection system comprises up to six (typically 4) pipes per tank extending horizontally into sand beneath the tank. An annual inspection is undertaken by unscrewing the cap on the pipe and observing whether there is any discharge. Discharges are tested for cyanide content.

The 11 elution tanks are located on concrete plinths in a concrete bunded area.

The gravity concentrator leach reactor is located in a concrete bund within a bund.

The CIL containment pond has a plastic liner over a clay liner, with a leak detection system.

The CIL stormwater pond has a plastic liner.

The two thickeners serviced by the cyanide line are located above a concrete slab. There is a ring bund around the thickener.

The flotation area is located on a bunded, concrete slab.

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All the cyanide pipelines are located in bund trays, except for the two cyanide lines to the thickener underflows, which are located above bunded areas. Bund trays are being installed for these two pipelines.

The area between the CIL tanks has been paved with asphalt, draining to concrete spoon drains, which drain to the CIL pond.

Secondary containments for cyanide unloading, storage, mixing and process tanks are sized to hold a volume greater than that of the largest tank within the containment and any piping draining back to the tank, and with additional capacity for the design storm event.

The containments at NBG are either a single area or multiple connected containments. The operation has prepared calculations for the cyanide containment areas. The calculations consider the requirements of this question and show that secondary containment volumes are appropriate. In some circumstances the volume of process plant stormwater ponds are used to ensure appropriate volumes are available. The stormwater ponds are connected to the secondary containments via sealed drains.

Procedures are in place for all cyanide containment facilities to prevent discharge to the environment of any cyanide solution or cyanide-contaminated water that is collected in the secondary containment area.

The *Containment Bund Spill Control* procedure applies to slurry or solution that is located within a bunded area of the plant where there are cyanide storage tanks, pipe lines or process tanks. All treatment plant containment bunds are fitted with sump pumps for spill recovery. The procedure includes a site plan identifying the cyanide pipelines and containment areas. The sump pumps are connected to the process to enable spillages to be pumped into the process. All of the cyanide process tanks have secondary containment.

If, in the event that a spill reaches soil, the site has procedures for testing and remediation of contaminated soil. All cyanide spills shall be clean-up immediately and the affected area remediated within 72 hours. Affected soil shall be returned to the CIL circuit or to F1 RDA.

NBG has developed procedures to respond to cyanide spills within containment and outside of containment.

Spill prevention or containment measures are provided for all cyanide process solution pipelines to collect leaks and prevent releases to the environment.

On the tailings line there are three monitoring strategies: differential flow measurement based on instruments at the remote ends of the line, pressure monitoring based on the expected drop in line pressure if a significant leak occurs when the pump is operating, and catchpits strategically located along the line.

Areas where cyanide pipelines present a risk to surface water have been evaluated for special protection needs.

A review of design drawings, site inspection and interviews appeared to confirm cyanide tanks and pipelines were constructed of materials typically used for such purposes such as:

- Stainless steel for reagent cyanide
- Mild steel for process tanks
- Rubber-lined mild steel and high density polyethylene (HDPE) for slurry systems
- Stainless steel for the elution area

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Standard of Practice 4.8: **Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.8**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.8 requiring that operations implement Quality control and quality assurance (QA/QC) procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

Quality control and quality assurance programs have been implemented during construction of some new cyanide facilities and modifications to existing facilities, including cyanide unloading, storage, mixing facilities and other cyanide facilities. Certification evidence was observed for the following areas that confirmed that the construction was in accordance with relevant conditions:

- Cyanide Storage Tank
- the piping for cyanide solutions at the flotation and leaching plants
- Fabrication of Decant Cyanide Destruction Tank
- Surge Tank Refurbishment
- Tailings Storage Facility Construction F1/F3 Residue Disposal Facility

Quality control and quality assurance programs have addressed the suitability of materials and adequacy of soil compaction for earthworks such as tank foundations and earthen liners, the installation of synthetic membrane liners used in ponds and for construction of cyanide storage and process tanks. There are no leach pads on the site.

Soil compaction test results were available for the three booster station tanks, the flotation and leach tanks and cyanide storage tanks. Further records were available for Construction of the Residue Disposal Area and CIL Containment Pond liner welding.

Quality control and quality assurance records have been retained for cyanide facilities, including material certificates/Test Reports from suppliers, steel welding records for tanks (welding specifications, qualification registers and testing records), synthetic liner welding records for ponds, pipeline visual and mechanical inspection records and non-conformance and corrective actions records.

Quality control and quality assurance records confirm that the facility has been built as proposed and approved as confirmed in handover documentation. The records are signed off by employees of the material supply companies, the construction companies and the project management firms.

Evidence of QA/QC or as-built certification documentation was available for the cyanide facility construction to enable a finding to be made for questions 4.8.1-4.8.4.

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Standard of Practice 4.9: **Implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and groundwater quality.**

The operation is
- ☒ **in full compliance with**
- ☐ in substantial compliance with **Standard of Practice 4.9**
- ☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 4.9 requiring that operations implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and groundwater quality.

The operation has developed written standard procedures for monitoring activities. NBG has developed a monitoring management strategy. It includes Surface Hydrology and Water Quality; and Groundwater Level and Quality Monitoring. The site also has a *Water Sampling and Monitoring* procedure and a *RDA Wildlife Monitoring* procedure.

The *Water Sampling and Monitoring* procedure has been developed to be consistent with Australian Standards AS 5667.1:1998; and all environmental procedures reviewed have been prepared by the relevant Environmental Officer and approved by the Environmental Superintendent. All environmental staff are appropriately trained in their field of expertise (i.e. monitoring, sampling, etc) and have relevant university degrees.

Where appropriate, the operation's procedures specify how and where samples should be taken, sample preservation techniques, chain of custody procedures and shipping instructions. The *Water Sampling and Monitoring* procedure details:

- sample collection and preservation
- chain of custody procedures, which includes shipping instructions
- figures detailing sample locations.

Cyanide species to be analysed are detailed on the surface water and groundwater monitoring sheets. The sheets define a suite of samples that need to be taken, this suite is then defined on the chain of custody paperwork.

Sampling conditions and procedures are documented in writing.

The NBG surface water and groundwater monitoring log sheet has a comments section where conditions affecting sampling can be recorded. A review of the field groundwater sampling sheets from the last round of sampling showed that conditions were focusing on abnormal conditions that may affect the sample and are able to be uploaded into the database (i.e. dry, no access, etc).

The NBG RDA Wildlife Observation Sheet has a section for documenting weather conditions including temperature, wind strength, cloud cover and rainfall. Examples of the wildlife observation sheets were viewed and they showed that conditions were being recorded.

The operation does not monitor for cyanide in discharges of process water to surface water as the operation does not have a direct discharge to surface water, but it does monitor for cyanide in surface water downgradient of the site. A number groundwater bores are monitored downgradient of the site and also downgradient of the whole operation.

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The operation inspects for and records wildlife mortalities related to contact with and ingestion of cyanide on a daily basis; a daily inspection is conducted first thing in the morning around the RDA. The RDA Wildlife Monitoring SOP states the areas that are observed and highlights these areas on a figure.

In order to determine if cyanide was the cause of wildlife mortality, the RDA Wildlife Mortality Response SWI details the actions to be implemented when a wildlife mortality or injured wildlife is detected at a RDA.

Monitoring is conducted at frequencies adequate to characterise the medium being monitored and to identify changes in a timely manner.

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PRINCIPLE 5 – DECOMMISSIONING

Manage Cyanide Process Solutions and Waste Streams to Protect Human Health and the Environment

Standard of Practice 5.1: **Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 5.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 5.1 requiring that operations plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

The operation has a *Cyanide Facilities Decommissioning Management Plan*.

The plan does include an implementation schedule for decommissioning activities. Project and task scheduling is detailed in the plan. In addition to this a high level implementation schedule has been prepared to guide decommissioning planning and is presented an Appendix to the Plan. The schedule is divided into yearly and monthly units and the planned tasks are scheduled up to 24 months prior to closure and continue for up to 12 months after closure (with some tasks recognised as likely to be ongoing).

The operation has established a system to review its decommissioning procedures for cyanide facilities during the life of the operation and revise them as needed. The next review due of the plan is October 2015.

The plan is current as of the time of the audit and the Auditor was advised that no changes have occurred since the development of the plan in 2010.

Standard of Practice 5.2: **Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 5.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 5.2 requiring that the operation establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

The operation has established a financial mechanism approved by the applicable jurisdiction to partly cover the estimated costs for cyanide-related decommissioning activities as identified in its decommissioning and closure strategy.

The DMP has established an *Unconditional Performance Bond* (UPB) system under Section 84 of the *Mining Act*. The UPB bond is a contract between the Minister and a third party of a financial standing acceptable to the Minister providing for that third party to pay a sum of money to the Minister on his request following the failure of a tenement holder to meet the previously agreed environmental conditions. This contract only applies to a specific tenement and cannot be transferred between tenements.

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NBG commissioned a consultant to undertake an assessment of the site and complete a demolition estimate for the Operation. These costs were calculated by domain and each domain was further separated into infrastructure within that domain.

As the bond amounts were not separated into the cyanide components and also because the bonds cannot be transferred between tenements the Auditor could not determine if the bond amounts were sufficient to cover the individual cyanide related decommissioning costs listed in the consultant's report.

The operation has assurance from a qualified financial auditor that it has sufficient financial strength to supplement the financial mechanism implemented by the DMP. As it could not be determined if the bond amount was sufficient to cover cyanide decommissioning costs, NBG commissioned a financial auditor to undertake a financial assessment for the cyanide related decommissioning activities of Newmont Australia Pty Ltd.

The report states that the financial assessment was undertaken in accordance with Australasian Auditing Standards applicable to agreed-upon procedures. The assessment was completed utilising the US Code of Federal Regulations (CFR):

- 40 CFR 246.143 (financial assurance for closure)
- 30 CFR 800.23 (self bonding)
- 10 CRF 30 (to rules of general applicability to domestic licensing of by-product material)

The financial auditor is certified to complete the financial assessment.

The Environmental Manager and Environmental Superintendent – Processing explained the findings in the report and confirmed that there is sufficient funding to cover the decommissioning costs of cyanide related activities. The Auditor is satisfied that this finding, in conjunction with the DMP bonds meant that the Operation is capable of fully funding cyanide related decommissioning activities.

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PRINCIPLE 6 – WORKER SAFETY

Protect Workers' Health and Safety from Exposure to Cyanide

Standard of Practice 6.1: **Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 6.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 6.1 requiring an operation to identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

NBG has developed procedures describing how cyanide-related tasks should be conducted, including:

- Reagent delivery checks
- Observing cyanide unloading
- Operating of the reagent and leach areas
- Confined space entry
- Operation of the Caro's acid plant
- Clean-up of spills
- Decontamination of equipment

The procedures require, where necessary, the use of personal protective equipment (PPE) and addresses pre-work inspections. All NBG SOPs list the PPE requirements for the identified task. In addition, signage is present throughout the Plant and the RDA.

As noted in 4.1.4, the operation has two main procedures to identify when changes in a site's processes or operating practices may increase the potential for the release of cyanide and to incorporate the necessary release prevention measures.

The Process Plant utilises a software package (Babel Fish) for software and instrumentation changes within the Process Plant. Once a change has been entered into Babel Fish, it is distributed to a list of stakeholders for comment. Set distribution lists have been established, but they do not include safety or environmental personnel. Instead, these personnel must be added manually to the distribution list. It is up to the Change Initiator or Change Approver to determine whether the change is relevant to safety and the environment. All Change Approvers are at the Supervisor level or above and are ultimately responsible for the risk assessments and changes in their work area.

The site has also developed a formal *Management of Change* procedure to identify and control hazards and risks associated with changes to facilities, equipment, materials, mining, milling or operating processes prior to any change being implemented. The scope does not apply to changes covered by an existing defined risk management or controlled process such as the instrumentation and software changes through Babel Fish. The procedure requires all changes to be risk assessed to determine the initial change risk or opportunity. Depending on the result, a Minor or Major Change Management Form is completed. The Change Initiator

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must obtain his/her Supervisor's sign-off prior to the change management process going any further. If the Supervisor agrees with the change, then a list of stakeholders is developed, who will participate in a formal risk assessment process. It is up to the Change Initiator and their Supervisor to determine whether environmental and safety personnel are stakeholders. The initial risk assessment process guides the selection of appropriate stakeholders and the Supervisor is ultimately responsible for ensuring that the appropriate stakeholders are engaged. Following the formal risk assessment process, all low/medium risk changes must be approved by the Technical Specialist, Department Superintendent or Department Manager. All high/extreme risk changes must be approved by the Department Manager and engineering, production, maintenance, environmental, community and HSLP department representatives. Evidence for changes involving cyanide was provided to the auditor that demonstrated that environmental and health and safety personnel were consulted.

The operation does solicit and actively consider worker input in developing and evaluating health and safety procedures.

Workers within each department assist in the development of procedures associated with their work area. These procedures are located on the intranet, which can be accessed by all employees, and are available for comment, even when not due for review. Suggestions or concerns regarding the procedures can be raised in shift prestart meetings. Similarly, any changes to procedures are communicated during the prestart meetings. In addition, site safety meetings are held on a monthly basis, where appointed Safety Representatives are involved in procedure reviews.

Standard of Practice 6.2: **Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 6.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 6.2 requiring NBG to operate and monitor cyanide facilities to protect worker health and safety and periodically evaluates the effectiveness of health and safety measures.

The operation has determined the appropriate pH for limiting the evolution of HCN gas during mixing and production activities. NBG currently aims for a pH of between 10.0 and 10.5. Process experience with the ore type indicates that below pH 10.0, there is a risk of HCN gas evolution, whilst a pH in excess of 10.5 can lead to scaling issues within the circuit. As such, a pH of 10.2 has been inputted into the online process control system (Babel Fish). Online samplers and automatic dosing pumps monitor the pH and adjust lime levels as necessary.

The operation uses monitoring to confirm that controls are adequate to limit worker exposure to hydrogen cyanide gas and sodium, calcium or potassium cyanide dust to 10 parts per million on an instantaneous basis and 4.7 parts per million continuously over an 8-hour period.

NBG has fixed, alarmed monitors in the:

- Reagents area (i.e. unloading and storage)
- All CIL areas

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The process technicians log HCN readings using their personal monitors two to three times per shift as back up for the fixed monitors.

The operation has identified areas and activities where workers may be exposed to cyanide in excess of 10 ppm on an instantaneous basis and 4.7 ppm continuously over an 8-hour period and do require use of personal protective equipment in these areas or when performing these activities.

Each task SOP states the PPE that workers must wear prior to undertaking the task. These PPE requirements are reinforced through training and signage in high risk areas. Personal HCN monitors must be worn in the following areas:

- Intensive leach reactor
- Flotation circuit
- CIL trains 1 and 2
- Elution
- Gold Room
- Residue disposal area
- Cyanide mixing and storage

The operation utilises both fixed and personal HCN monitors. Fixed hydrogen cyanide monitoring equipment is bump tested weekly and calibrated monthly, and records are retained for at least one year. Personal monitors are bump tested before each use and calibration occurs every 90 days as per the manufactures recommendations. Warning signs have been placed where cyanide is used, advising workers that cyanide is present, and that smoking, open flames and eating and drinking are not allowed, and that, if necessary, suitable PPE must be worn. In addition, training material highlights were smoking, eating and drinking is allowed. Unescorted access to the Plant Areas is not permitted without the appropriate level of training.

Showers, low-pressure eyewash stations and dry powder or non-acidic sodium bicarbonate fire extinguishers located at strategic locations throughout the operation. Inspections of showers and eyewash stations are carried out daily by Process Technicians and monthly by the Maintenance Department. Records provided indicate that the required inspections are taking place.

Fire extinguishers are serviced under contract by Chubb. All inspection tags on the fire extinguishers viewed by the auditor were current.

The operation has identified unloading, storage, mixing and process tanks and piping containing cyanide to alert workers of their contents. Through inductions and training in SOPs, all personnel working in the process area are aware that cyanide is in use and in low concentrations in the process water. Due to this training, it is NBG's policy to only label high and medium strength areas. All concentrated cyanide lines are painted lilac, labelled "Cyanide" and have an arrow indicating the direction of flow. Medium strength lines >15 mg/l WAD cyanide are labelled "Low Cyanide Slurry" or "Low Cyanide Solution", with the direction of flow indicated.

MSDS', first aid procedures and informational materials on cyanide safety were available in the language of the workforce (English) in areas where cyanide is managed, including the cyanide unloading area and at the entry points to the CIL trains.

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Procedures are in place and being implemented to investigate and evaluate cyanide exposure incidents to determine if the operations programmes and procedures to protect worker health and safety, and to respond to cyanide exposures, are adequate or need revising. The operation's Accident and Incident Reporting procedure defines the processes and responsibilities for internal and external reporting and investigations into accidents and incidents. The procedure requires that all cyanide incidents be reported to Newmont Corporate using a specific cyanide incident form. At site, all incidents and their associated investigations are tracked in NBG's event management software database (Cintellate). This software tracks the progress of the investigation, including tasks, corrective actions and outcomes. Two minor incidents have occurred recently regarding the release of small quantise of low strength cyanide material to the environment. In each instance, the incident was investigated as per the sites procedure and corrective actions established to reduce the likelihood of such an incident reoccurring. There have been no cyanide exposure incidents at NBG.

Standard of Practice 6.3: **Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 6.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 6.3 requiring an operation develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

The operation has a 24 hour on-site clinic with a defibrillator, oxygen, cyanide antidote kit, water and two ambulances. Communication equipment available on-site include fixed and mobile phones, VHF and CB radios and an alarm system.

The clinic is manned by a registered nurse and an occupational health nurse. ESOs and selected ERT members are also trained as industrial emergency responders and industrial paramedics.

The operation conducts inspections of its first aid equipment regularly to ensure that it is available when needed and materials such as cyanide antidotes are stored and/or tested as directed by their manufacturer and replaced on a schedule to ensure that they will be effective when needed. Weekly and monthly inspections are carried out by ERT members on response equipment and vehicles.

The cyanide antidote kit stored in the clinic is checked monthly and new antidotes are ordered one month prior to expiry. The antidote given to the Boddington District Hospital has the same expiry date as the one held at NBG. Therefore, both antidotes are replaced by NBG at the same time.

The operation has developed and implemented specific written emergency response plans or procedures to respond to cyanide exposures. Such procedures include:

- Hazardous materials emergency response
- Cyanide poisoning treatment

The operation has developed procedures to transport workers exposed to cyanide to locally available qualified off-site medical facilities. Following treatment in the on-site clinic, workers exposed to cyanide can be transported to Boddington District Hospital, if required, using one of two ambulances located on-site.

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NBG and the hospital have a written agreement to treat cyanide exposure cases from NBG. In addition, NBG has provided an antidote kit to the hospital and training in its use has been provided. The auditor was provided with a copy of a signed training attendance sheet.

It is the intention of the HSLP Superintendent – Asset Protection to run a cyanide or HAZMAT drills every quarter within the ERT teams. Site wide drills will be conducted every one to two years and will alternate between cyanide releases and exposures. Two mock drills have recently been conducted at NBG, one involving the release of cyanide product from an isocontainer and the other a HCN exposure incident. After each drill, a post incident analysis was undertaken, which involved identifying positive outcomes and issues requiring follow-up. The auditor was shown the tracking of actions arising from the post incident analysis on the site's event management system.

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PRINCIPLE 7 – EMERGENCY RESPONSE

Protect Communities and the Environment through the Development of Emergency Response Strategies and Capabilities

Standard of Practice 7.1: **Prepare detailed emergency response plans for potential cyanide releases.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 7.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 7.1 requiring an operation prepare detailed emergency response plans for potential cyanide releases.

The operation has developed and implemented an ERP to address potential accidental releases of cyanide. At the corporate level, Newmont maintains a RRS to mitigate and prevent the escalation of adverse consequences in the event that existing risk management controls fail. When an incident or issue occurs that can have the potential to seriously threaten Newmont's operations, reputation and the safety and well-being of its employees, a decision is made by the Site Emergency Controller whether to implement the RRS. At the site level, NBG has an ERP that deals with the overall coordination of preparation and response to various incidents at NBG. Its purpose is to define NBG's organisational procedures, responsibilities and reporting requirements to ensure the effective and timely management of all emergencies and unforseen incidents that may occur at NBG. Beneath the ERP sit several incident and task specific emergency procedures.

NBG has plans and procedures in place to respond to:

- Catastrophic releases of hydrogen cyanide from storage or process facilities
- Transportation accidents
- Releases during unloading
- Releases during fires and explosions
- Pipe, valve and tank ruptures
- Overtopping of ponds and impoundments
- Power outages and pump failures
- Uncontrolled seepage
- Failure of cyanide treatment, destruction or recovery systems
- Failure of tailings impoundments

The cyanide supplier, AGR, is contractually responsible for emergency response until the cyanide has been transferred into the storage tanks at NBG. As such, AGR has a TMP that details response actions in the event of an emergency. This TMP considers the transport route, properties of the cyanide product, method of transport and the design of the transport vehicle.

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NBG The emergency response documentation describe specific response actions, such as:

- Evacuation
- Cyanide spill response
- Cyanide poisoning treatment.

Standard of Practice 7.2: Involve site personnel and stakeholders in the planning process.

The operation is
- ☒ **in full compliance with**
- ☐ in substantial compliance with **Standard of Practice 7.2**
- ☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 7.2, requiring an operation involve site personnel and stakeholders in the planning process.

The operation has involved its workforce and stakeholders in the cyanide emergency response planning process. NBG emergency preparedness is based on the outcomes of a site wide risk assessment conducted by Emergency Response Personnel and knowledgeable people in relevant departments. Following risk identification, the Emergency Response Group in conjunction with the relevant discipline experts have developed the ERP and SOPs that define the basic procedures that must be followed for the combating of each type of emergency scenario. Specific response plans have then been derived from the risk register on a facility or equipment basis.

The workforce is also involved in the ERP planning process via their participation in cyanide emergency drills and the post incident analysis process.

NBG has provided copies of the ERP to a number of concerned external entities, including the local shire, hospital and emergency services organisations. The HSLP Superintendent (Asset Protection) is responsible for providing these entities with revised copies of the ERP when updates are made.

The operation has made potentially affected communities aware of the nature of their risks associated with accidental cyanide releases. NBG is a member of the LEMC and has provided information to the committee members on the transport of cyanide to site and the ERP. In addition, NBG has conducted an exercise with members of the committee in relation to vehicular accidents during cyanide transport.

The operation has engaged in consultation or communication with stakeholders to keep the ERP current.

The ERP is updated yearly or when warranted from lessons learnt (e.g. following exercises or activations of the ERP). Any changes to the ERP are communicated to the workforce via Safety Committee meetings and pre-shift meetings, as appropriate. The workforce is able to suggest changes to the ERP following activation or exercise through debriefing sessions held s part of the post-incident analysis process.

Outside stakeholders are engaged through the document control and review process. When a change to the ERP is made copies of the document or relevant pages are sent to the stakeholders and they are required to sign-off on their receipt of the new copy.

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Standard of Practice 7.3: **Designate appropriate personnel and commit necessary equipment and resources for emergency response.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 7.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 7.3 requiring an operation designates appropriate personnel and commit necessary equipment and resources for emergency response.

NBG's ERP and associated documentation do:

- Designate primary and alternate emergency response coordinators who have explicit authority to commit the resources necessary to implement the plan. The General Manager is in charge of any emergency situation that may occur on site. The General Manager has delegated responsibility to the Emergency Response Coordinator, who acts as the Incident Controller in the event of a major incident or an incident requiring external resources. The Incident Controller is responsible for all aspects of the management of the incident. The duty Emergency Services Officer is designated as the initial on-scene Incident Controller.
- Identify emergency response teams. The Emergency Response Group is led by a Superintendent supported by five Emergency Services Officers and approximately forty ERT members. ERT members are designated as such on their site access cards and the system logs them in as being present on-site when the pass through the front gate. In the event of an incident, these members are paged.
- Require appropriate training for emergency responders, including breathing apparatus, confined space rescue, cyanide incident response, emergency driving, hazardous materials, fire fighting and varying degrees of medical training,
- Include call-out procedures and 24-hour contact information for the coordinators and response team members. ERT members on-site are activated through a swipe card pager system, which identifies ERT members present on-site when they enter through the front gate. In addition, the ERP has a contact list with contact information for Department Managers, health and safety personnel and the duty Emergency Services Officer.
- Specify the duties and responsibilities of the coordinators and team members, Emergency Services Officers, General Manager, ERT members, Emergency Response Coordinators, Incident Controller, Environmental Officer, Security Officer and Site Manager.
- List emergency response equipment, including personal protection gear, vehicles, spill response equipment and medical supplies available on-site.
- Include procedures to inspect emergency response equipment on a weekly basis to ensure its availability.

The operation has made outside entities included in the ERP aware of their involvement and has included them as necessary in mock drills or implementation exercises. Outside entities have been mentioned in the ERP have been sent controlled copies of the ERP. An exercise involving a cyanide incident during transport was conducted in March 2011, which involved local external agencies.

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Standard of Practice 7.4: **Develop procedures for internal and external emergency notification and reporting.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.4**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 7.4 requiring the development of procedures for internal and external emergency notification and reporting.

NBG emergency documentation includes procedures and contact information for notifying management, regulatory agencies, outside response providers and medical facilities of the cyanide emergency. This includes call-out procedures for emergencies and contact information for Department Managers, health, safety and medical personnel and the duty ESO. The RRS also has contact information for SRT and RRT members, Government and regulatory bodies, emergency services, major contractors and neighbours.

The emergency response documentation includes procedures and contact information for notifying potentially affected communities of the cyanide related incident and any necessary response measures, and for communication with the media. The site is located approximately 13 km from the town of Boddington. As such, NBG has deemed there is no threat to the community from a cyanide incident at the mine. Despite this, relevant agencies and community organisations are given copies of the ERP as a reference and are party to discussions on emergency response during LEMC meetings.

Media communication is governed through the site's Media Relations procedure.

Standard of Practice 7.5: **Incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.5**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:
NBG is in FULL COMPLIANCE with Standard of Practice 7.5, requiring an operation develop procedures for internal and external emergency notification and reporting.

The NBG emergency documentation describes specific remediation measures as appropriate for the likely cyanide release scenarios, such as:

- Recovery or neutralisation – The *NBG spill response* procedure outlines the containment of spills and recovery with soda ash or neutralisation. The procedure notes that neutralisation with Ferrous Sulphate, Sodium Hypochlorite or Hydrogen Peroxide is a last resort and the Environment Department should be consulted before their use.
- Decontamination of soil and other media – The *NBG spill response* procedure requires that all impacted soil is removed and replaced with clean fill as necessary. A *sampling and testing* procedure is in place to determine whether all affected soil has been removed.

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- Management and/or disposal of spill clean-up debris – The *NBG spill response procedure* requires that all affected soil be returned to the CIL circuit or to the RDA. It also requires that the decontamination of tools and equipment with water is to be undertaken in areas connected to a CIL Circuit sump.

- Provision of an alternate drinking water supply – NBG operates a reverse osmosis unit and storage pond for site potable water. In the event of a catastrophic failure (e.g. tank rupture and RDA overtopping), cyanide solution may report to the potable water storage pond. In such an instance, NBG has bottled water available on-site as an alternate means of drinking water supply. In addition, the village is connected to Boddington's scheme water.

  The RDA sits 100 m from the catchment boundary for Perth's major drinking water supply (South Dardanup Dam). However, the RDA sits below the crest of the catchment divide and any major loss of containment would flow away from the catchment and further into NBG's lease. In addition, the dam for the catchment in some 15-20 km from the RDA. As such, NBG has deemed that there is no risk to this drinking water supply.

Ferrous sulphate, soda ash and lime are available at NBG to be used to neutralise cyanide spills. The operation's emergency documentation prohibits the use of ferrous sulphate where there is a risk of it entering a waterway.

Standard of Practice 7.6: **Periodically evaluate response procedures and capabilities and revise them as needed.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.6**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 7.6 requiring an operation periodically evaluate response procedures and capabilities and revise them as needed.

NBG reviews and evaluates the cyanide related elements of its ERP on a regular basis. It is the responsibility of the HSLP Manager – Asset Protection to review the plan annually. The previous ERP (rev 4) was dated 5 May 2010 and was revised on 30 May 2011 (rev 5).

Mock cyanide emergency drills are conducted periodically as part of the emergency response plan evaluation process. Four mock drills have been undertaken since 2009, involving environmental releases and worker exposures. The last two mock drills were undertaken in March and August 2011.

Provisions are in place to evaluate and revise the ERP after any cyanide related emergency. The ERP states that changes may be made arising from incident investigations and resultant outcomes. No cyanide incidents requiring the activation of the ERP have occurred to date. However, updates to the ERP have resulted from exercises and audits of the plan and associated systems.

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PRINCIPLE 8 – TRAINING

Train Workers and Emergency Response Personnel to Manage Cyanide in a Safe and Environmentally Protective Manner

Standard of Practice 8.1: **Train workers to understand the hazards associated with cyanide use.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 8.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 8.1 requiring an operation train workers to understand the hazards associated with cyanide use.

NBG trains all personnel who may encounter cyanide in cyanide hazard recognition. Hazard recognition training is given to all employees during the Site Induction. Cyanide specific hazard training is only given to those that will encounter cyanide as part of their work, which includes all Process Plant workers, ERT members, medical staff and selected environmental, health and safety and maintenance staff. This training is given as part of the Cyanide Awareness Induction. Workers that have not undergone the Cyanide Awareness Induction cannot work unescorted in areas where cyanide is present.

Cyanide hazard recognition and refresher training has been completed for all required personnel. The Cyanide Hazard Awareness Induction is required for all personnel that may encounter cyanide during the course of the work. This training is only valid for two years and to remain valid refresher training is required. A review of the sites training matrices and employee training records indicated that refresher training is being undertaken every two years.

The operation does retain cyanide training records. Hardcopies are scanned and saved in the training file for each member. Attendance at cyanide awareness training is recorded in the applicable training matrices, and is currently being transferred into PDC. Of the training files viewed by the auditor, scanned hardcopies were sighted.

Standard of Practice 8.2: **Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 8.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 8.2 requiring that an operation trains appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

NBG trains workers to perform their normal production tasks, including unloading, mixing, production and maintenance, with minimum risk to worker health and safety and in a manner that prevents unplanned cyanide releases. The training received by new starters covers site inductions, Cyanide Awareness, operational training manuals and task specific SOPs. The operational training manuals and SOPs cover training related to normal production tasks. Each new starter receives on the job task training from

experienced operators in the field. Workers cannot undertake tasks unsupervised until the SOP for the specific task has been signed off by the operator.

The training elements necessary for each job involving cyanide management are identified in training materials. Course overviews are available for inductions, which outline the important training elements that must be conveyed to inductees. The operational training manuals and SOPs identify specific areas where cyanide specific training is required.

Appropriately qualified personnel provide task training related to cyanide management activities. The training and assessment system is mentoring based whereby a senior operator demonstrates and trains personnel in all relevant tasks. Senior staff complete the mentoring by 100% shadowing and then supervision. All senior staff are sufficiently experienced and have completed all the required training for their role. This is followed by a competency based practical assessment process, which is completed by a Process Training Coordinator (for cyanide areas). All Process Training Coordinators have attained Cert IV in Workplace Training and Assessment, and have several years experience working in a processing environment.

Employees are trained prior to working with cyanide. The Learning and Development Department coordinates this training for all visitors, contractors and employees. The Process Training Coordinator stated that personnel cannot work unsupervised on-site until they have undergone the required inductions (e.g. area specific and Cyanide Awareness) and been deemed competent in the tasks they are to undertake.

Refresher training on cyanide management has been provided to employees that work with cyanide. As mentioned in 8.1.2, Cyanide Awareness refresher training is conducted biennially at NBG.

The operation evaluates the effectiveness of cyanide training by testing, observation or other means. Individuals are assessed at the conclusion of the Cyanide Awareness training by a trainer and the key learning outcomes of the awareness session reinforced by the trainer. Process circuit training for process operators includes competency based assessments. NBG has also introduced a formal task observation process within the Process Department. This involves Supervisors undertaking task orientated observations of Process Technicians against each procedure. Following the observations, the Supervisor will discuss his findings with the employee and instigate any re-training as required.

Records are retained throughout an individual's employment documenting the training they receive. The records do include the names of the employee and the trainer, the date of training, the topics covered, and if the employee demonstrated an understanding of the training materials. Hardcopies are generally scanned and saved in the training file for each member. However, some of the training files viewed by the auditor were missing training records from several years ago. More current training, including that pertaining to cyanide was present in the files viewed by the auditor.

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Standard of Practice 8.3: **Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 8.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 8.3 requiring an operation train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

Cyanide unloading, mixing, production and maintenance personnel trained in the procedures to be followed if cyanide is released. Non-ERT members are only required to raise the alarm and evacuate. All emergences are to be handled by the ERT.

Site cyanide response personnel are trained in decontamination and first aid procedures. Personnel have taken part in drills to test and improve their response skills. The ERP requires that ERT members are trained in:

- Breathing apparatus
- Confined space rescue
- Cyanide incident response
- Emergency driving
- HAZMAT
- Road crash rescue
- Rope rescue
- Advanced structural fire fighting
- Vertical rescue
- Wildfire

Selected ERT members receive advanced pre-hospital medical training. Training records for several ERT members for external HAZMAT and first aid courses were viewed by the auditor.

Emergency Response Coordinators and members of the Emergency Response Team are trained in the procedures included in the ERP regarding cyanide, including the use of necessary response equipment. On-site training is held each Tuesday, focussing on core ERT competencies. ERT members also participate in drills. The last two cyanide related drills conducted in 2011 involved the ERT response to a HCN exposure and a cyanide spill.

The operation has made off-site Emergency Responders, such as community members, local responders and medical providers, familiar with those elements of the ERP related to cyanide. NBG participates in LEMC meetings every two months. The LEMC includes local authorities and emergency services. In addition, copes of the ERP has been sent to each of these entities.

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Refresher training for response to cyanide exposures and releases is conducted regularly. This includes weekly core ERT training, regular cyanide emergency drills and biennial Cyanide Awareness training.

Cyanide emergency drills are evaluated from a training perspective to determine if personnel have the knowledge and skills required for effective response. This occurs through a Post Incident Analysis undertaken after each drill. Actions arising from these analyses lead, were necessary, to revisions in training and operating procedures.

Records are retained throughout an individual's employment documenting the training they receive. The records include the names of the employee and the trainer, the date of training, the topics covered, and if the employee demonstrated an understanding of the training materials. Electronic copies of training conducted by ERT members are kept in a database by the Learning and Development Department. Hardcopies are kept in a filing cabinet in the ESO office. Some electronic files for ERT members were missing, however, hardcopies were located in the ESO office.

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PRINCIPLE 9 – DIALOGUE

Engage in Public Consultation and Disclosure

Standard of Practice 9.1: **Provide stakeholders the opportunity to communicate issues of concern.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 9.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 9.1 requiring an operation provide stakeholders the opportunity to communicate issues of concern.

NBG is located approximately 16 km north-west of Boddington, which is the closest community. NBG has a Social Responsibility Manager, based in Boddington with responsibility for the development and maintenance of a communications strategy, which incorporates stakeholder engagement with respect to cyanide.

Mechanisms in place to inform the community and provide them opportunities to raise concerns include:

- The NBG Community Information Centre located in Boddington town.
- Quarterly Community Update Meetings
- Pamphlets and newsletters distributed to employees, contractors and stakeholders including the local community. These include:
  - The Golden Scoop
  - Dig This
  - Beyond the Mine (hard copy and website)
- Hotham Williams Catchment Environmental Alliance
- Boddington Local Emergency Management Committee

Internally, the operation provides employees and contractors the forum to raise concerns regarding the use of cyanide through inductions and safety toolbox meetings.

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Standard of Practice 9.2: **Initiate dialogue describing cyanide management procedures and responsively address identified concerns.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 9.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 9.2 requiring an operation initiate dialogue describing cyanide management procedures and responsively address identified concerns.

NBG has created opportunities for the operation to interact with stakeholders and provide them with information regarding cyanide management practices and procedures.

At an operational level, NBG has developed the following opportunities to communicate to internal stakeholders:

- Site Safety Meeting
- Toolbox meetings
- Newsletters
- Monthly Health Safety and Loss Prevention (HSLP) and Environment and Social Responsibility (ESR) forums
- Cyanide awareness training – Given to all personnel working within the process plant area

External stakeholders are engaged via:

- The NBG Community Information Centre located in Boddington town.
- Quarterly Community Update Meetings
- Pamphlets and newsletters distributed to employees, contractors and stakeholders including the local community.
- Hotham Williams Catchment Environmental Alliance
- Boddington Local Emergency Management Committee

At corporate level, Newmont Asia Pacific has developed the Beyond the Mine, available via website (www.beyondthemine.com) and as a hard copy report. The website has a link to a *Contact Us* page, where questions can be emailed to Newmont staff, and the report contains information on cyanide and its management, as well as the Cyanide Code.

NBG produce an AER, which details all environmental incidents that occurred on-site during the reporting period. Permission from NBG is not required to access the AER, and the public can access the AER through the Freedom of Information Act. The Environmental Superintendent – Monitoring also advised that she provides copies of the AER to anyone who rings her requesting a copy; and a copy is also available at the community information centre.

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In a set of mine information pamphlets, NBG has produced a site specific information sheet title “Cyanide Management”. This is available at the Community Information Centre and at town events and includes information the use of cyanide at the site and information based on the nine ICMI principles.

Standard of Practice 9.3: **Make appropriate operational and environmental information regarding cyanide available to stakeholders.**

The operation is

☒ **in full compliance with**

☐ in substantial compliance with **Standard of Practice 9.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

NBG is in FULL COMPLIANCE with Standard of Practice 9.3 requiring an operation make appropriate operational and environmental information regarding cyanide available to stakeholders.

NBG has written descriptions of how their activities are conducted and how cyanide is managed, these include:

- Pamphlets and newsletters
- Annual Environmental Report
- Beyond the Mine document and website

Based on the close proximity of the mine to Boddington, and discussions with the NBG Social Responsibility Advisor, it was considered that the illiterate proportion of the local population did not constitute a significant percentage.

The operation has mechanisms to make information publicly available on the cyanide release or exposure incidents, where applicable. Any safety and environmental related incident information is reported in the Annual “Beyond The Mine” report, which is publicly available; and on the “Management of Cyanide at Newmont” page of the website. The statistics are provided for each operation, including Boddington, and cover:

- Incidents of cyanide exposure resulting in hospitalization
- Incidents where releases off the mine site required response or remediation
- Incidents where releases on or off the mine site resulted in significant adverse effects to health
- Incidents where releases on or off the mine site resulted in significant adverse effects to the environment.
- Incidents where a release on or off the mine site required reporting under applicable regulations.
- Incidents where releases caused applicable limits for cyanide to be exceeded.

Four minor cyanide releases in August 2010 were reported to the public via this mechanism. The releases did not result in environmental impact and corrective actions were implemented to reduce the likelihood of similar releases.

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APPENDIX A

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LIMITATIONS

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